

ABSTRACT OF THE DISCLOSURE

The present invention relates to integrated circuits comprising a protective overcoat and thick copper connectors. According to one aspect of the inventions, vias in the protective overcoat are substantially filled with tungsten
5 plugs, or plugs of another metal with a relatively low coefficient of thermal expansion. According to another aspect of the invention, large vias in the protective overcoat are replaced with arrays of smaller vias. The invention reduces the likelihood of device failures during temperature cycling tests. Also,
10 the invention allows for smaller vias in the protective overcoat and removal of interconnect functions to the thick copper layer.